REMARKS

This amendment is responsive to the Office Action issued April 9, 2003.

Claims 6, 19 and 32 were rejected under 35 USC section 112, second paragraph, as being indefinite. Reconsideration and withdrawal of these rejections are respectfully requested.

The following searches were conducted on May 6, 2003 in the USPTO's online database of issued patents. The first search was to find the number of patents that include the phrase "substantially coplanar" anywhere in the patent. The results of this search are shown below:

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Searching 1976 to present...
Results of Search in 1976 to present db for:
"substantially coplanar": 10501 patents.
Hits 1 through 50 out of 10501

Therefore, fully **10,501** patents from 1976 to the present include the phrase "substantially coplanar" therein. Given the Office's own willingness to include this phrase in issued patents, it is respectfully submitted that the phrase is not indefinite. Moreover, of the **10,501** occurrences of "substantially coplanar" anywhere in the patent, over half of these included the phrase in the claims. Indeed, the search was then refined to find all occurrences of the phrase "substantially coplanar" in the claims of the allowed patents:

Searching 1976 to present...
Results of Search in 1976 to present db for:
ACLM/"substantially coplanar": 5521 patents.
Hits 1 through 50 out of 5521

An additional **1,287** patents included the phrase "substantially **co-planar**" in the claims:

Searching 1976 to present...

Results of Search in 1976 to present db for:
ACLM/"substantially co-planar": 1287 patents.
Hits 1 through 50 out of 1287

Of these 5,521 + 1,287 = **6,808** issued patents within that time period that include "substantially coplanar" or "substantially co-planar" in the claims, 35 of these also include "disk drive" in the claims:

Results of Search in 1976 to present db for:
ACLM/"substantially coplanar" AND ACLM/"disk drive": 35 patents.
Hits 1 through 35 out of 35

and an additional 9 patents include the phrase "substantially co-planar" and "disk drive" in the claims:

Results of Search in 1976 to present db for:
ACLM/"substantially co-planar" AND ACLM/"disk drive": 9 patents.
Hits 1 through 9 out of 9

By the Patent Office's own standards, therefore, the expressions "substantially coplanar" or "substantially co-planar" are not indefinite. Given the Office's past and continuing practice of allowing claims containing such terms both in disk drive technology and outside such area, the grounds for rejection are improper.

Moreover, it is respectfully submitted that "substantially co-planar" is suitably definite and serves to protect applicant's invention by including within the scope of the claim devices in which the insular region(s) are shown to miss co-planarity by the smallest offset relative to the leading air bearing region. Indeed, without such language, it is respectfully submitted that any slider could be shown not to infringe such a claim, if the resolution of the instrument measuring such potential co-planarity were to be sufficiently fine. For the foregoing reasons, therefore, it is respectfully submitted that the phrase "substantially co-planar" accurately describes

embodiments of the present invention, is suitably definite under the patent statute and is in accordance with past USPTO practice of allowing such claims. Reconsideration and withdrawal of the 112(2) rejections are, therefore, respectfully requested.

Claims 1-11, 13-24, 26-37 and 39 were rejected as being anticipated by Otsuka, US patent 6,529,346. Reconsideration and withdrawal of these rejections are respectfully requested.

As amended, independent claims 1, 14 and 27 recite that the leading air bearing region and the (at least one) insular region are substantially co-planar. In Otsuka, the protuberances 17 are not co-planar or substantially co-planar with the leading end 10a. This is apparent from inspection of, for example, Figs. 2, 6F and 7 of Otsuka, which clearly show that the protuberances protrude from the top-most surface 62 of the leading edge 10a. Col. 9, line 24-25 of Otsuka states, with reference to Fig. 2, that "Preferably, the height H of the protrusion 17 is greater than the crown height R." Therefore, it is clear that even if the surface 62 were to be flat (i.e., if the radius of curvature shown in Fig. 2 were to be zero and R were to be equal to zero), the protrusion 17 would still protrude from the underlying surface 62, as the specification clearly states that the height H is greater than the crown height R.

The independent claims of the present application have each been amended to recite that the leading air bearing region and the insular regions are substantially co-planar. Indeed, the ABS according to embodiments of the present invention comprises two regions: the leading air bearing region of the ABS and the insular regions of the ABS. Together, these substantially co-planar regions define the air bearing surface (ABS) of the present slider. The Otsuka reference does not show such a slider. In contrast, in Otsuka, the protuberances 17 protrude above every other structure in the slider. Reconsideration and withdrawal of the section 102 rejection of the above-listed claims are, therefore, believed to be warranted.

The claims were also variously rejected as being anticipated by or obvious over the

applicant's discussion in the Background section of the present application. Reconsideration and withdrawal of these rejections are respectfully requested, for the following reasons.

Figs. 1A and 1B show structure that is similar to that disclosed by Otsuka, above. Indeed, Figs. 1A and 1B each show that the protuberances 106 protrude above the ABS 102. Consequently, as can clearly be seen in Figs. 1A and 1B, no part of the ABS 102 can be said to be co-planar or even substantially co-planar with the protuberances 106. The independent claims have been amended so as clearly and positively recite this distinction. Neither Figs. 1A and 1B nor the corresponding description thereof in the written portion of the specification teaches or suggests that the ABS 102 may be co-planar or substantially co-planar with the protuberances 106. Thus, both the anticipatory and obviousness rejections are deemed to have been overcome. Reconsideration and withdrawal of the 102(b) and 103(a) rejections are, therefore, respectfully requested.

Applicant's attorney believes that all claims are allowable as incorporating allowable subject matter and that the present application in condition for an early and rapid allowance and passage to issue. If any unresolved issues remain, please contact the undersigned attorney of record at the telephone number indicated below.

Respectfully submitted,

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MARKED VERSION TO SHOW AMENDMENTS MADE

--1. (Amended) A head stack assembly for a disk drive having a disk, the head stack assembly comprising:

a body portion including a bore defining a pivot axis;

an actuator arm cantilevered from the body portion;

a head gimbal assembly supported at the actuator arm and including:

a load beam;

a gimbal coupled to the load beam, and

a slider coupled to the gimbal and including a transducer for reading and writing on a recording surface of a disk, the slider including an air bearing surface that is configured to form a shallow recessed surface and a deep recessed surface, the air bearing surface including a leading air bearing region and at least one insular region configured to reduce stiction with the disk, **the at least one insular region being substantially co-planar with the leading air bearing region,** the shallow recessed surface being disposed between the air bearing surface and the deep recessed surface.--

Cancel claim 6.

--14. (Amended) A disk drive, comprising:

a disk having a recording surface;

a head stack assembly, including:

a body portion including a bore defining a pivot axis;

an actuator arm cantilevered from the body portion, and

a head gimbal assembly supported at the actuator arm and including:

a load beam;

a gimbal coupled to the load beam, and

a slider coupled to the gimbal and including a transducer for reading and writing on the recording surface, the slider including an air bearing surface that is configured to form a shallow recessed surface and a deep recessed surface, the air bearing surface including a leading air bearing region and at least one insular region configured to reduce stiction with the disk, **the at least one insular region being substantially co-planar with the leading air bearing region,** the shallow recessed surface being disposed between the air bearing surface and the deep recessed surface.--

Cancel claim 19.

--27. (Amended) A slider for a disk drive including a disk, the disk including a recording surface, the slider comprising:

a transducer for reading and writing on the recording surface, and

an air bearing surface that is configured to form a shallow recessed surface and a deep recessed surface, the air bearing surface including a leading air bearing region and at least one insular region configured to reduce stiction with the disk, **the at least one insular region being substantially co-planar with the leading air bearing region,** the shallow recessed surface being disposed between the air bearing surface and the deep recessed surface.--

Cancel claim 32.